Cisco Commands

# Werk proces 1

## Command line

Router> User Mode

Router>enable

Router# privileged Mode

Router#configure terminal

Router(config)# Global Configuration Mode

## Show previous commands we have entered

Router#show history

## Change the history size

Router#terminal history size 50 (0-256)

## Change the hostname

Router(config)#hostname HeadOffice

HeadOffice(config)#

## View Configurations

HeadOffice#show running-config

## Save router configuration to NVRam

HeadOffice#copy running-config startup-config

## Reload the router

HeadOffice#reload Page 2

## Restore back-ups

Om back-ups terug te zetten vul je de volgende commando’s in:

Switch# enable

Switch# configure terminal

Switch(config) config-register 0x2102

Switch(config) exit

Switch# reload

Nu start je het device opnieuw.

Switch# show running-config

Control leer of de back up is gemaakt.

## Banner MOTD message of the day

HeadOffice(config)#Banner motd # Verboden toegang #

## Login banner

HeadOffice(config)#Banner login # Wel Come to the Public Router#

## enable password

HeadOffice(config)#enable password CISCO

## enable secret password

Router(config)#enable secret CCNA

## Console password

HeadOffice(config)#line console 0

HeadOffice(config-line)#password console

HeadOffice(config-line)#login

## encrypt passwords

HeadOffice(config)#service password-encryption

## Stop ip domain lookup

HeadOffice(config)#no ip domain-lookup

## Console logout time

HeadOffice(config)#line console 0

HeadOffice(config-line)#exec-timeout min sec Page 3

## OSPF instellen

Device(config)# router ospf [ID Name]

Device(config-router)# network 192.168.129.16 0.0.0.3 area 20

## OSPF authentication

R1(config)#int fa0/0

R1(config-if)#ip ospf authentication-key secret

R1(config-if)#ip ospf authentication

Router#show ip ospf interface serial 2/0

## SSH

Router(config)#service password-encryption

Router(config)#ip domain-name horizoncollege.nl

hostname R1

crypto key generate rsa

How many bits in the modulus [512]: 1024

R1(config)#login block-for 180 attempts 4 within 120

R1(config-line)#transport input ssh

R1(config-line)#login local

## Stop disturbing console message when typing

HeadOffice(config)#line console 0

HeadOffice(config-line)#logging synchronous

## View the date and time

HeadOffice#view clock

## Change the timezone

HeadOffice(config)#clock timezone utc 5 30

## Change the time

HeadOffice#clock set h:m:s date month year (if now time is 8 10 am we must - 5 30 from it when enter the time)

## NTP Server

Switch(config)#ntp server [IP]

Switch(config)#ntp authenticate

Switch(config)#ntp trusted-key 1

Switch(config)#ntp authenticate-key 1 md5 [Password]

**show ntp associations**

**ntp server [IP NTP server]**

## Configure fastethernet interface

HeadOffice(config)#interface fastethernet 0/0

HeadOffice(config-if)#Description CONNECTION TO LAN ADMIN

HeadOffice(config-if)#ip address 192.168.1.1 255.255.255.0

HeadOffice(config-if)#no shut

## Configure serial interface

HeadOffice(config)#interface serial 0/0/0

HeadOffice(config-if)#ip address 192.168.10.1 255.255.255.252

HeadOffice(config-if)#description WAN CONNECTION TO 2ND FLOOR

HeadOffice(config-if)#clock rate 64000 (DCE interface)

HeadOffice(config-if)#no shut Page 4

## Back-up tftp

Switch# wr mem

Switch# copy startup-config tftp:

Address or name of remote host []? [IP Address]

Destination filename [Switch-confg]? [Name config file]

## Back-up ftp

Switch# enable

Switch# config t

Switch(config)# ip ftp username [Username]

Switch(config)# ip ftp password [Password]

Switch# wr mem

Switch# copy running-config ftp:

Address or name of remote host []? [IP Address]

Destination filename [Switch-confg]? [Name config file]

## DHCP Server instellen

Router(config)#ip dhcp pool [Naam DHCP Pool]

Router(dhcp-config)#network 192.168.0.0 255.255.255.0

Router(dhcp-config)#default-router 192.168.0.1

Router(dhcp-config)#dns-server 192.168.0.1 (Hoeft niet perse)

**Ip adressen excluden**

Router(config)#ip dhcp excluded-address 192.168.10.0 192.168.10.9

## View interface details

HeadOffice#show controllers serial 0/0/0

Show physcial configurations

HeadOffice#show version

## Static route

HeadOffice(config)#ip route 192.168.2.0 255.255.255.0 192.168.10.1

(destination network) (subnetmask) (next hop address)

or

HeadOffice(config)#ip route 192.168.2.0 255.255.255.0 serial 0/0/0

(destination network) (subnetmask) (exit interface)

VTY Lines Password

UpaaeRouter1(config)# line vty 0 15

paaeRouter1(line-config)# password hans

UpaaeRouter1(line-config)#login

## Port security

Switch(config)#int fa0/1

Switch(config-if)#switchport mode access

Switch(config-if)#switchport port-security

Switch(config-if)#switchport port-security mac-address sticky

## Vlan Ip address geven

Switch(config)#interface vlan (Vlan nummer)

Switch(config-if)#ip address (ip) (submask)

## Vlan aanmaken

Switch> Enable

Switch# Vlan datebase

Switch# Vlan (nummer) name (naam die je wilt geven)

**Maak een switch primary vlan**

Switch> Enable

Switch# Config Terminal

Switch(config) spanning-tree vlan (nummer) root primary

## VTP Instellen

Switch> enable

Switch# config terminal

Switch(config) interface vlan (Vlan name)

Switch(vlan)#**vtp domain (Domain Name) (kan je in theorie zelf kiezen)**

Switch(vlan)#vtp password (password)

Switch(vlan)#**vtp {client | server | transparent}**

## Vlans koppelen aan interface

Switch> enable

Switch# config terminal

Switch(config) interface (Name)

Switch(config-if)switchmode access vlan (nummer)

## Trunkpoort aanmaken

Switch> enable

Switch# config terminal

Switch(config) interface (Name)

Switch(config-if)switchmode mode trunk

**optioneel commando, niet altijd beschikbaar op switchesswitch**

Switch(config-if)**switchport trunk encapsulation dot1q**

**Als je vlans wilt toevoegen aan trunk poort gebruik dit**

switch(config-if)switchport trunk allowed vlan xx,xx

**om te testen of je trunkpoort werkt gebruik:**

Switch#show interfaces trunk

## ACL instellen

**Doe dit echt als laatste stap anders gaat misschien je netwerk naar de klote!!!**

R1#config terminal

R1(config)#ip access-list extended (lijst naam)

R1(config-ext-nacl)#deny (tcp of udp) 192.168.20.0 0.0.0.255 host 192.168.10.100 eq (poortnummer)

R1(config-ext-nacl)#permit ip any any

## ACL koppelen aan interface

Switch(config) interface (naam interface)

Switch (config-if) ip access-group (acl naam) in

## DHCP pools per vlan

Maak zoveel pools aan als je nodig hebt in dat geval maak er twee aan

Zorg voor trunk poorten en voeg de vlans die je wilt gebruiken aan router toe

Switch> enable

Switch# config terminal

Switch(config-subif) interface (Name) (nummer.1)

Switch(config-subif) ip address (IP) (Mask)

Switch(config-subif) encapsulation dot1q (vlan nummer)

Switch(config-subif) No shutdown

Switch(config-subif) end

Switch(config-subif) interface (Name) (nummer.2)

Switch(config-subif) ip address (IP) (Mask)

Switch(config-subif) encapsulation dot1q (vlan nummer)

No shutdown

## Om CDP en LLDP inteschakelen

Router(config)cdp run

Router(config)lldp run

# Werk Proces 2

## Command prompt

## Ping om connectie te checken

Ping (IP)

Tracert (IP)

## Telnet/ssh om verbinding te maken met router

telnet (default gateway)

ssh -l (username) (ip)

## Om verbonden apparaten te ontdekken

Arp -a

## Command Line

## Om info over interfaces te vinden

Router>show interface

## Om routes te bekijken (let op ‘via’ voor connecties met andere routers)

Router>show ip route

## Om verbonden apparaten te ontdekken

Router>show arp

## Werkt een beetje hetzelfde al arp

Router>Show cdp neighbors detail

Router>Show lldp

## Om te checken of de start-up config opgeslagen is

Router>Show flash